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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/886,411	06/20/2001	Hidekazu Kojima	IGARA 19.001 AUS	4233

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EXAMINER	
VARGOT, MATHIEU D	

ART UNIT	PAPER NUMBER
1732	

DATE MAILED: 09/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/886,411	KOJIMA ET AL.	
	Examiner	Art Unit	
	Mathieu D. Vargot	1732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 September 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3 and 9-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3 and 9-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *5/3 & 9/7/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1.Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 2, lines 3-4 applicant recites that when heating the resin, "a preset temperature is maintained ... after having reached the glass transition temperature" while claim 1 states that the resin is in fact heated up to the glass transition temperature. In view of this, the meaning of "preset temperature" in claim 2 is indefinite. It would appear that such temperature should be the glass transition temperature. Also in claim 2, line 6, does the "start time of heating" refer to the heating of the mold or the heating of the resin?

2.The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent 7-311,316 in view of Japanese Kokai 4-163,119.

Japanese –316 is applied generally for reasons of record, the reference disclosing the basic claimed method lacking essentially a clear disclosure that the mold is heated so that the resin injected thereinto is heated up to a glass transition temperature.

Japanese –119 discloses injecting a resin into a mold which is heated up to the glass transition temperature of the resin and holding the injected resin at this temperature for a period of time as set forth in instant 2, lines 2-3. It would have been obvious to one of

ordinary skill in the art at the time of invention to have modified the process of the primary reference as taught by Japanese –119 to ensure that the molded resin is strain-free upon product removal. Japanese –316 discloses that the heating of the mold controls the viscosity of the light-curing resin and this is submitted as encompassing the recitation of instant claim 3.

3.Claims 9, 10 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent 7-311,316 in view of Laliberte et al (see 2, 4, 8 and 10 in Fig. 3).

Japanese Patent –316 discloses the basic claimed method as set forth in paragraph 2, supra, the primary reference essentially lacking a clear disclosure of heating and monitoring a unit configured to store and inject the resin in order to enhance its flowability into the mold. As already noted, it is believed that the heating of the mold/resin to reduce viscosity of the resin as disclosed in Japanese –316 renders the aspect of heating "for enhancing flowability" as obvious, since this is quite well known in the art. Ie, it is common knowledge that heating a resin reduces its viscosity and this would naturally allow the resin to be more easily injected into the mold. Laliberte et al discloses a lens molding process where liquid resin is heated in a storage unit and injected into a mold while the heating is continued, and it is submitted that one of ordinary skill in this art would have recognized that such enhances the flowability of the resin—see col. 3, line 50, "its viscosity will be relatively low". It is submitted that the power supply 6 heats the resin and also monitors the process since it maintains the charge at the desired "sufficiently high temperature" so the viscosity stays low. The only

reason one would do this is to enhance the flowability of the resin into the mold upon injection. It would have been obvious to one of ordinary skill in the art to have modified the process of Japanese –316 as taught by Laliberte et al in order to enhance the delivery of the resin into the mold as generally shown in the secondary reference.

4.Claims 11 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent 7-311,316 in view of Laliberte et al and Japanese Kokai 4-163,119 for reasons of record.

5.Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Upon reconsideration, it is submitted that the instant claims are obvious over the art as now applied. In a previous response, applicant has indicated that Japanese –316 does not heat the resin to a glass transition temperature. This cannot be ascertained from the abstract and if applicant has a translation of the document, such would be greatly appreciated in the response to this office action. Also, note that claims 9, 10 and 12-14 do not require the resin to be heated to its glass transition temperature, but merely be heated, which Japanese –316 does clearly disclose. The aspect of heating and monitoring a storage unit for the resin as set forth in independent claims 9 and 13 is taught by Laliberte et al and hence these claims are submitted to be obvious over the combination as applied.

6.Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mathieu D. Vargot whose telephone number is 571 272-1211. The examiner can normally be reached on Mon-Fri from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Colaianni, can be reached on 571 272-1196. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M. Vargot
September 16, 2004

M. Vargot

Mathieu D. Vargot
Primary Examiner
Art Unit 1732

9/16/04